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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,751	07/19/2002	Ralf-Uwe Bauer	4197-114	8808

23448 7590 04/01/2005

INTELLECTUAL PROPERTY / TECHNOLOGY LAW
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EXAMINER	
OSELE, MARK A	
ART UNIT	PAPER NUMBER
1734	

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/088,751	BAUER ET AL.	
	Examiner	Art Unit	
	Mark A. Osele	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over XP-002161407 (Rogowin S.A.). Rogowin S.A. teaches that it is known that bleached cellulose exhibits discoloration and decomposition at high temperatures due to the presence of carboxyl groups. This problem is present regardless what type of bleached cellulose is used or whether a particular solvent is possibly decomposed with the cellulose. This decomposition would occur whether the cellulose is heated in the dry state or in a solution. The use of cellulose with a particular carboxyl group is arbitrary and within the purview of one of ordinary skill in the art. A person of ordinary skill addressing the problem of reducing cellulose decomposition would directly deduce from Rogowin S.A. that the carboxyl group content of cellulose must be as low as possible. It would have been obvious to one of ordinary skill in the art that this could be accomplished by either blocking the carboxyl groups as shown by Rogowin S. A. or keeping the carboxyl content as low as possible in the starting material. It progresses therefrom that decomposition will be lower when the carboxyl group content is low. In addition, the level of the carboxyl content in the product does not have a structural

impact, but merely affects the level of discoloration and the amount of discoloration that is acceptable is a choice for one of ordinary skill in the art.

Response to Arguments

3. Applicants' arguments filed December 28, 2004 have been fully considered but they are not persuasive. Applicants argue that one of ordinary skill in the art upon reading Rogowin would only be led to block the carboxyl groups with calcium rather than decreasing the carboxyl groups present in the first place. It is the examiner's contention that one of ordinary skill in the art would take the teaching of Rogowin that "carboxyl groups decrease the thermostability of cellulose and the fibres made thereof" as indication that the number of carboxyl groups should be limited or, if possible, eliminated. Although Rogowin teaches that calcium blocking of carboxyl groups can decrease the amount of depolymerization, it does not eliminate the depolymerization completely. Elimination of carboxyl groups in the first place would achieve results at least as good as calcium blocking, if not better. Furthermore, elimination of carboxyl groups in the base material would eliminate the need for calcium blocking, which may not be feasible for all processes.

Applicants further argue that the Rogowin reference is directed to viscose fibers not lyocell fibers as in the instant claims and that lyocell fibers are so different from viscose fibers that one of ordinary skill in the art would not expect procedures for viscose fibers to be applicable to lyocell fibers. As evidence, applicants point particular passages in the reference by Colom in their appendix. One of these passages, "...the

viscose fibers are more affected to the degradation....For lyocell fibers, this transformation is partial..." indicates that although lyocell fibers show less degradation, some degradation still occurs. One of ordinary skill in the art upon reading the Colom reference would still be directed to the teachings of Rogowin to prevent the degradation which occurs in lyocell fibers because this degradation is shown to be a comparable, though lessened, reaction as in viscose fibers.

As to applicants questioning of the Rogowin reference directed to dry cellulose rather than cellulose dissolved in an aqueous tertiary aminoxide solvent, one of ordinary skill in the art would be directed to the solution of eliminating carboxyl groups rather than blocking them by calcium because the calcium blocking requires a water rinse step which is not practical for fibers dissolved in a solvent.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Osele whose telephone number is 571-272-1235. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MARK A. OSELE
PRIMARY EXAMINER

March 30, 2005